DOCUMENT RESUME

ED 208 553 EA 014 106

TITLE	Improving Student Performance in Basic Skills. The Arkansas Plan for Instructional Management.
INSTITUTION	Arkansas State Dept. of Education, Little Rock. Div. of Instructional Services.
PUB DATE	80
NOTE	145p.
EDRS PRICE	MF01/PC06 Plus Postage.
DESCRIPTORS	Achievement Tests; *Basic Skills; Competence; Curriculum Development; *Educational Assessment; Educational Objectives; Elementary Secondary Education; Language Arts; *Minimum Competency Testing; Program Guides; Reading Skills; State Legislation; *State Programs; State Standards
IDENTIFIERS	*Arkansas; Mathematics Skills

ABSTRACT

Intended to help Arkansas schools implement its 1980 State Basic Skills Improvement Plan, this booklet identifies basic skills to be measured by the state and makes suggestions for incorporating these skills into the curriculum. The first section explains the Educational Assessment Act of 1979 establishing a statewide basic skills assessment program. The next two sections present the implications of this act for schools and statewide goals of the Basic Skills Improvement Plan. In the next section "quality control" in a school is discussed; that is, determining the match between identified learning objectives, curriculum, and student achievement. The development of instructional objectives by Arkansas educators and published as the "Basic Educational Skills" book is described in the next section. The largest section of the book lists those instructional objectives in math, reading, and language arts in grades 4-9 and lists how each is measured by the standardized test chosen to assess achievement. How to analyze curriculum content to see if learning objectives are being taught is presented in the next section. This is followed by a section on how to make sure classroom learning activities directly relate to the objectives, including a sample lesson plan. A concluding section discusses the achievement of quality control. (Author/JM)

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IMPROVING STUDENT PERFORMANCE IN BASIC SKILLS

THE ARKANSAS PLAN FOR INSTRUCTIONAL MANAGEMENT

ARKANSAS DEPARTMENT OF EDUCATION
Don R. Roberts, Director

DIVISION OF INSTRUCTIONAL SERVICES
Sherman Peterson, Associate Director

Little Rock, Arkansas

1980

EA 014 106

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INTRODUCTION

This booklet was compiled to present a system of instructional management for use by Arkansas schools. Its major focus is directed toward the Basic Educational Skills book and the SRA testing series.

The intent of this system will be to help Arkansas schools in the improvement of student performance; particularly, that performance which is measured by the statewide testing program. (The Education Assessment Act of 1979)

If districts can achieve and maintain control over the quality, content and direction of their curriculum, then they will have a measure of control over the quality, content and direction of the achievement of students who experience that curriculum.

Some of the materials presented in this booklet are not complete. They are presented as samples or examples of ingredients that are necessary in the production of a system of curriculum improvement.

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I. Educational Assessment Act of 1979

The Educational Assessment Act (Act 666) of 1979 was adopted by the Arkansas Legislature establishing a statewide assessment program in the public schools of Arkansas.

It provided the means whereby the patrons of the districts of the State may be informed of the educational achievements of students. The stated purposes, as identified in the Act are:

1) To measure pupil performance in the basic subjects taught generally in the schools of the State.
2) To provide data concerning the strengths and weaknesses of the instructional programs of the various school districts in the State.
3) To provide information to assist in planning educational programs and identifying educational priorities.
4) To provide teachers with diagnostic information.
5) To assess how well district educational goals and minimum performance goals are being met.

The Act requires that the Arkansas Department of Education shall administer an annual assessment program in the public elementary and secondary schools of the State. This program requires that two types of tests be administered to students in at least three grades.

The subject areas of Mathematics and Reading are required, however, additional areas may be selected by the Department of Education.

The State Board of Education was required to review the minimum performance goals established by Act 484 of 1977. After review and adoption of the performance goals, described in the Basic Educational Skills book, the Department was to develop a series of criterion-referenced tests (minimum performance tests) to be administered at grade levels 3, 6, and 8. The development of these

minimum performance tests involved Arkansas educators in the process. Appropriate field testing and item analysis is being conducted. The validated tests will be administered to all students in grades 3, 6, and 8 during the 1981-82 school year.

A second dimension of the state testing program is the administration of a norm-referenced standardized test. In the selection of this instrument, several testing companies were asked to correlate the stated objectives in the Basic Educational Skills book adopted for Arkansas, and those objectives measured by the published test. The SRA Achievement Series was deemed to have the best match.

The SRA Achievement Series was administered in 1980 to 48,419 students in grades 3, 4, 6, 8 in the State of Arkansas. All students in grade 4, and a 15% sample in grades 3, 6, & were tested.

This year (1980-81 school year) the SRA will be administered in grades 4, 5, 6, and 8.

Note: The composite score reflects the Reading, Mathematics and Language Arts section of the SRA.

II. Implications of Statewide Assessment Programs

Results of a statewide student assessment program give school district personnel and patrons data to make decisions and judgments as to the effectiveness of an instructional program.

It is assumed that a norm-reference test, specifically, the SRA Achievement Test, measures behaviors that are nationally recognized as significant learnings at each grade level in each learning area.

In the areas of Reading, Mathematics and Language Arts, these skill tests have been judged to be significant, regardless of the location or size of a school.

What the SRA Test, or any other norm-reference achievement test measures, is how one set of students performs in relationship to another set.

If the objectives of a school directly relate to the assessment instrument, then feedback to the school has more direct significance. If this is the case, then districts may use the results to evaluate the performance of a student, or a group of students, in the areas of basic educational skills that have been taught.

If, however, the test data is not related to an identified curriculum, then the measure of student performance becomes merely comparative. It cannot give direct feedback to the effectiveness of a stated curriculum.

The implications of this, or any selected statewide assessment program, are two fold:

1) It directs attention to group and individual student performance.
2) It directs attention to the relevancy and effectiveness of a school's identified curriculum.

III. Statewide Goals of the Basic Skills Improvement Plan

The State Basic Skills Improvement Plan, adopted in March, 1980, is designed to implement five major goals. They are:

1. To coordinate all available resources for Elementary, Secondary, and Adult Education in order to develop and implement a comprehensive and systematic statewide plan for improving achievement in Basic Skills.
2. The project staff will provide assistance to Local Education Agencies in the development and implementation of comprehensive programs to improve Basic Skills, proficiency and instruction in the Elementary and Secondary Schools.
3. To arrange for and assist in the training of Educational Personnel involved in Basic Skills Instruction.
4. To provide state leadership in the planning, execution and evaluation of Basic Skills Instructional Programs in Elementary and Secondary Schools.
5. To develop means and implement strategies by which parents working with schools can contribute to the improvement of the Basic Skills achievement of their children.

As one aspect of this plan, an instructional managment system is a vehicle to address implementation of several aspects of these goals.

It is a system to identify those Basic Skills measured on the SRA Achievement Tests, the method in which they are measured, and suggestions for the use of this data for classroom teaching.

If we define curriculum as objectives which are taught and tested, then the Basic Skills curriculum in schools becomes the identification of relevant objectives, methods of teaching geared to the objectives and the appropriate measurement of pupil performance.

If a Basic Skills curriculum is to be effectively implemented and assessed, then there must be congruence between what is taught, the way it is taught, and what is tested.

The following sections will provide techniques and methods to assist local school districts in defining and teaching the Basic Skills curriculum.

IV. Quality Control

The concept of quality control in a school identifies the degree to which there is a planned and systematic congruence ("match") between: what a teacher teaches; what a teacher should teach; and, what students actually learn.

If a district is able to decide and communicate its objectives; the student performance required; the types of assessment that will measure pupil performance; and, how to achieve better pupil performance results; then, the district has attained and exercised control over its curriculum.

Quality control in a district, therefore, is evident if the following aspects are present:

1. There are clear, identified, written objectives.
2. There are plans that indicate a relationship between these objectives and the teaching activities.
3. There is a commitment and plan to teach directly to achieve objectives.
4. There is a direct link between a testing program and the identified objectives, and the identified teaching process.

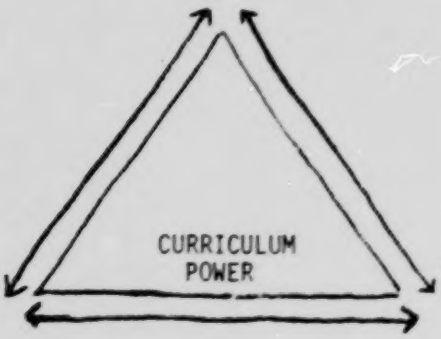
The last component of quality control implies that a school district should be aware of how well any given test matches its curriculum. (The curriculum states the specific objectives, and the testing program should be aligned to those objectives.) If this is not the case, then school districts cannot use the results of test data to adjust any aspects of the curriculum to improve pupil performance.

The following sections of this booklet will identify and describe the elements of quality control in a school district. Objectives will be directly related to the Arkansas Basic Educational Skills book and the SRA Achievement Test. (As relates to grades 4,5,6,8, SRA Test Levels E,F,G)

NOTE: Portions of this section were adapted from Fenwick E. English, "Improving Curriculum Management in the Schools," Council for Basic Education, Washington, D.C.

QUALITY CONTROL
IN
SCHOOLS

TESTING
(SRA and Minimum Performance Tests)



Teaching

Description
(Content analysis of teaching)

Curriculum
guide

Prescription
(Product - Basic Skills)
SRA content

Adapted from the work of
Dr. Fenwick English

Rating Scale
3 = Defined specifically
2 = Defined generally
1 = Defined vaguely or merely implied
0 - Not defined

Subject _____ School _____

Criteria	Rating 3	2	1	0	Points
1. Existence of Specific Measurable Objectives in the LEA					
___Linked to philosophy of the school					
___Sequentially based K-12.					
___Specific and measurable pupil based objectives					
___Procedures to measure identified objectives					
2. Definition by Grade of Statewide Objectives					
___Knowledge and skills identified in the Basic Educational Skills book					
___Knowledge and skills measured by the SRA Tests					
3. Use of Test Data					
___Objectives directly matched to SRA					
___Instruction matched with format in which test questions are presented					
___Use of test data by teachers to increase effectiveness of instruction					

V. Development of Instructional Objectives

As a means of implementing Act 666 (1979), educators throughout the State of Arkansas established educational goals and performance standards. These goals and standards are identified in the Basic Educational Skills book, 1980. They serve as the framework for a Basic Skills curriculum in the State of Arkansas.

Instructional objectives are anticipated student outcomes, stated in behavioral performance terms. They are designed to answer these questions:

1. What does a teacher expect students to accomplish?
2. What changes in the student's learning does the teacher intend?
3. How would a student demonstrate that he/she has achieved the learning?

Objectives are specific, measurable statements of pupil learning. They identify three main components of a specific learning:

1. The behavior (derived from the content of instruction of the learning).
2. The conditions (the form of measurement) under which the learning will be assessed.
3. The criteria used to determine if the learning has been achieved.

Using the Basic Educational Skills book as a guide, school districts need to derive instructional objectives for each skill that will be measured and taught.

In the absence of specific instructional objectives, student behaviors or learnings measured may have little relationship to what is being taught, thus, school effectiveness may be measured by instruments with little congruence to what is occuring in the classroom. If SRA or minimum performance tests are to be used to indicate an aspect of school effectiveness and productivity, then objectives must be identified and taught that relate to these measurement instruments.

VI. Matching Elements of Instruction

In order to manage and control the curriculum of a school in relation to how pupil performance will be assessed in terms of Basic Skills, the following components, or elements, of the instructional program must be matched:

1. Objectives ⟷ Objectives
   Basic Educational Skills ⟷ SRA Test
2. *Objectives ⟷ Materials
   Adopted Texts and
   Supplementary Materials
3. *Objectives ⟷ Classroom Instruction
   Method of Teaching
   Method of Assessment
4. *Objectives ⟷ Method of Assessment
   SRA Test

*Combination of Basic Skills and SRA Test Objectives.

This matching provides the congruence between content objectives and test content.

If these elements are present in the curriculum, then the test measures what and how content is taught.

The following materials are presented to indicate portions of this match. Since the Reading, Mathematics and Language Arts sections of the SRA test are combined to compute the composite score, these sections are treated. Similarly, the Basic Educational Skills book was organized into three areas; Reading, Mathematics and Communications Skills. (While the majority of skills in the Communication skills section are not measured by a standardized test, some areas are.)

Each section is presented by grade level and test level. Grades 4 and 5 are measured by SRA test level E; Grade 6 and 7 by SRA test level F; Grades 8 and 9 by SRA test level G.

Except for Language Arts, each SRA test area is matched to the Basic Educational Skills. If there is not a SRA test item to test a Basic

Skill, it is also noted. If SRA test items measure skills not identified in the Basic Skills, it is also noted. The Language Arts section identifies the objectives tested without the reference of the Basic Educational Skills book.

4th Grade Mathematics

	BASIC SKILLS OBJECTIVE	SRA TEST MEASUREMENT	METHOD OF MEASUREMENT All Items are Multiple Choice
*1.1	Identify the place value of each digit in a four-digit number.	Concepts 2	Identify the place value of a digit in a four- or five-digit number.
*1.2	Identify the relationship between 2 or more four-digit numbers (greater than, less than, equal to).	Concepts 6	Choose appropriate symbol, greater than, less than, equal to.
1.3	Round numbers to the nearest ten or hundred.	Not Measured	
1.4	Read and write numbers to 100,000.	Concepts 1	Identify the word name for a four- or five-digit number.
*2.1	Add 3 three-digit numbers with regrouping.	Computation 1-3	Identify sum of three-digit numbers written horizontally or vertically.
*2.2	Subtract three-digit numbers with regrouping.	Computation 6-9	Identify difference of two three-digit numbers with regrouping written horizontally or vertically.
2.3	Subtract three-digit numbers with zero in the minuend.	Computation 6	Identify difference of two three-digit numbers.
2.4	Solve a simple one-step reading problem using addition or subtraction.	Problem Solving 3,5,7-8,19	Identify appropriate operation and identify solution to a one-step word problem using addition or subtraction.
*2.5	Demonstrate mastery of multiplication facts through the nines.	Computation 10	Identify product of two one-digit numbers written horizontally or vertically.
*2.6	Multiply a two-digit number by a one-digit number.	Computation 11-12	Identify product of two numbers written horizontally or vertically.
*2.7	Demonstrate mastery of multiplication by tens.	Computation 11	Identify product of two numbers, one of which is a multiple of ten.

4th Grade Mathematics

	BASIC SKILLS OBJECTIVE	SRA TEST MEASUREMENT	METHOD OF MEASUREMENT All Items are Multiple Choice
2.8	Demonstrate mastery of division facts with dividends through 81.	Computation 17	Identify quotient resulting from division of a two-digit number by a one-digit number.
*2.9	Divide a three-digit number by a one-digit number without a remainder.	Computation 17	Identify quotient of a three-digit number divided by a one-digit number without a remainder, written horizontally or vertically.
2.10	Divide a three-digit number by a one-digit number (with or without a remainder).	Computation 18-20	Identify quotient of a three-digit number divided by a one-digit number, written horizontally or vertically.
2.11	Divide a three-digit number by any two-digit multiple of ten.	Not Measured	
2.12	Solve a simple one-step reading problem using multiplication or division.	Problem Solving 1,8-9,11	Identify appropriate operation and identify solution to a one-step word problem using multiplication and division.
*3.1	Identify the numerator and denominator of a fraction.	Not Measured	
3.2	Add fractions with like denominators.	Computation 35,37	Identify sum of two simple fractions with like denominators.
3.3	Subtract fractions with like denominators.	Computation 39	Identify difference of two simple fractions with like denominators.
3.4	Compare two fractions using a model (greater than, less than, equal to).	Concepts 16,19	Choose appropriate symbol, greater than, less than, equal to.
3.5	Find a unit fractional part of a whole number less than 50.	Concepts 13-14	Identify the fraction that tells what part of a set or region is shaded.

4th Grade Mathematics

	BASIC SKILLS OBJECTIVE	SRA TEST MEASUREMENT	METHOD OF MEASUREMENT All Items are Multiple Choice
3.6	Solve a simple one-step reading problem using addition or subtraction of fractions with like denominators.	Problem Solving	Identify solution to a one-step word problem using addition or subtraction of simple fractions with like denominators.
3.7	Read and write decimal fractions to hundredths.	Concepts 21	Identify word name for a one- or two-place decimal.
*4.1	Tell time to the nearest minute.	Not Measured	
*4.2	Determine the value of a collection of coins to $10.	Not Measured	
4.3	Identify the unit name associated with the symbols, cm, m, kg, C°, l.	Concepts 24-25,28	Measured indirectly by requiring association between symbol and word name as one process in measuring another concept.
*4.4	Measure a line segment to the nearest half-inch or centimeter.	Not Measured	
4.5	Measure the perimeter of a polygon.	Concepts 25,28	Compute, then identify, the perimeter of a polygon using metric units.
4.6	Measure area in square units by counting.	Concepts 29	Count squares to determine area, then identify correct solution.
4.7	Name equivalent measurements in cups, pints, quarts, and gallons.	Not Measured	
*4.8	Identify correctly the temperatures as shown on a Fahrenheit or Celsius thermometer.	Concepts 24	Select reading from model of a thermometer.
4.9	Solve a simple one-step reading problem related to measurements.	Problem Solving 9,11,18,20,22	Identify appropriate operation and identify solution to one-step word problem using measurement.
5.1	Identify examples of geometric shapes such as line, line segment, ray and point.	Measured in Level D	

BASIC SKILLS OBJECTIVE	SRA TEST MEASUREMENT	METHOD OF MEASUREMENT All Items are Multiple Choice
5.2 Identify models of spheres, cones, cylinders, cubes, rectangular prisms, and pyramids.	Measured in Level D	
6.1 Read and interpret tables, charts, and graphs using data relative to classroom situations.	Problem Solving 29-30	Select appropriate answer from information presented in graph form.
6.2 Make predictions from tabulated data relative to classroom situations.	Not Measured	

5th Grade Mathematics

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	BASIC SKILLS OBJECTIVE	SRA TEST MEASUREMENT	METHOD OF MEASUREMENT All Items are Multiple Choice
*1.1	Identify the place value of each digit in a five-digit number.	Concepts 2	Identify the place value of a digit in a 4 or 5 digit number.
*1.2	Identify the relationships between two or more five-digit numbers (greater than, less than, equal to).	Concepts 6	Choose the appropriate symbol-greater than, less than, equal to.
1.3	Round numbers to the nearest 1000.	Concepts 4	Identify the numeral rounded to the nearest ten, hundred or thousand.
1.4	Read and write numbers to 1,000,000.	Concepts 1	Identify the word name for a 4 or 5 digit numeral.
*2.1	Add three or more four-digit numbers with regrouping.	Computation 5	Identify the sum of two 4 digit numbers.
*2.2	Subtract any four-digit number with regrouping.	Computation 6-9	Identify the difference of two whole numbers, each having two or three digits.
2.3	Solve a two-step word problem using addition or subtraction.	Problem Solving 2,3,4,5,7,8,21,24	Identify the solution to a one or two step word problem using addition or subtraction of whole numbers.
*2.4	Multiply a two-digit number by a two-digit number.	Computation 10-15	Identify the product of two and three digit multiplication problems.
2.5	Multiply a three-digit number by a two-digit number.	Computation 16	Identify the product of a 2 or 3 digit number and a two digit number.
*2.6	Demonstrate mastery of division facts with dividends through 81.	Computation 17	Identify the quotient and remainder, if any, resulting from the division of a two-digit number by a 1-digit number.

5th Grade Mathematics

	BASIC SKILLS OBJECTIVE	SRA TEST MEASUREMENT	METHOD OF MEASUREMENT All Items are Multiple Choice
*2.7	Divide a three-digit number by a one-digit number (with or without a remainder).	Computation 17-20	Identify the quotient and remainder, if any, resulting from the division of a 3-digit number by a 1-digit number.
*2.8	Divide a three-digit number by a two-digit multiple of 10 (with or without a remainder).	Not Measured	
2.9	Divide a three-digit number by any two-digit number (with or without a remainder).	Computation 22	Identify the quotient and remainder, if any, resulting from the division of a 3 or 4-digit number by a 2-digit number.
2.10	Solve a two-step reading problem using multiplication or division.	Problem Solving 1,4,8,12,19,21,22,25	Identify the solution, or the correct method, for finding the solution to a 1 or 2-step word problem requiring multiplication or division.
2.11	Name a common factor or two numbers.	Not Measured	
2.12	Name common multiples of two numbers.	Not Measured	
3.1	Find a common denominator of two fractions.	Not Measured	
3.2	Determine if a fraction is in its simplest form; if not, simplify it.	Concepts 19	Identify an equivalent fraction in simplest form.
3.3	Add fractions with unlike denominators.	Computation 36	Identify the sum of two fractions with unlike denominators.
3.4	Subtract fractions with unlike denominators.	Not Measured	
3.5	Change a mixed number to an improper fraction and change an improper fraction to a mixed number.	Not Measured	

	BASIC SKILLS OBJECTIVE	SRA TEST MEASUREMENT	METHOD OF MEASUREMENT All Items are Multiple Choice
3.6	Add mixed numbers having like denominators.	Computation 38	Identify the sums of 2 mixed numbers, no regrouping.
3.7	Add mixed numbers having unlike denominators.	Not Measured	
3.8	Subtract mixed numbers having like denominators.	Computation 38	Identify the difference of two fractions with like denominators.
3.9	Subtract mixed numbers having unlike denominators.	Not Measured	
3.10	Compare unlike fractions (greater than, less than, equal to).	Concepts 16-19	Choose the appropriate symbol-greater than, less than, equal to.
3.11	Multiply two fractions and state the product in the simplest form.	Computation 40	Identify the product of two fractions.
3.12	Multiply a mixed number by a fraction and state the product in the simplest form.	Not Measured	
3.13	Multiply a mixed number by a whole number or another mixed number and state the product in the simplest form.	Not Measured	
3.14	Solve a two-step reading problem using addition, subtraction and multiplication of fractions.	Problem Solving 9,13,20,26	Identify the solution to a 1 or 2-step word problem involving fractions and mixed numbers requiring addition, subtraction and multiplication.
3.15	Compare decimal fractions (greater than, less than, equal to).	Not Measured	

	BASIC SKILLS OBJECTIVE	SRA TEST MEASUREMENT	METHOD OF MEASUREMENT All Items are Multiple Choice
*3.16	Add two or more decimal fractions through hundredths.	Computation 23,24,30,31	Identify the sum of two 1 or 2 place decimals (involving money).
*3.17	Subtract decimal fractions through hundredths.	Computation 25,26,32,33	Identify the difference of two 1 or 2 place decimals (involving money).
3.18	Solve a one or two-step reading problem using addition or subtraction of decimal fractions through hundredths.	Problem Solving 6-10,23	Identify the solution to a 1-step word problem involving decimals, money and time requiring addition and subtraction.
4.1	Identify the unit name associated with the symbols, millimeter, centimeter, decimeter, meter, kilometer, gram, kilogram, milliliter, liter and celsius.	Concepts 23-24	Select the reading from a picture of a thermometer. Select the appropriate metric unit.
4.2	Measure a line segment to the nearest centimeter, millimeter, one-half, one-fourth and one-eighth inch.	Not Measured	
*4.3	Relate 0^{o} C and 100^{o}C to freezing and boiling temperature of water.	Not Measured	
4.4	Express weight in grams and kilograms.	Not Measured	
5.1	Identify a point, line, line segment, ray perpendicular lines, parallel lines, intersecting lines, angle, vertex and right angle.	Concept 27	Identify the figure that has a right angle.

5th Grade Mathematics

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BASIC SKILLS OBJECTIVE		SRA TEST MEASUREMENT	METHOD OF MEASUREMENT All Items are Multiple Choice
5.2	Identify center, diameter and radius of a circle.	Not Measured	
5.3	Identify parallelograms and other quadrilaterals.	Not Measured	
6.1	Use a chart, graph or table to find information.	Problem Solving 29	Identify the solution to a word problem involving a bar graph.
6.2	Interpret data from charts, tables and graphs.	Problem Solving 30	Identify the solution to a word problem involving a bar graph.

Grades 4 and 5 - SRA Test Level E - Subtest Math

Objectives measured on SRA Test not included in the Basic Skills Booklet

SRA Item:	Objectives
Concepts 3	Identify the standard numeral for a 4-, 5-, or 6-digit number given in expanded form (S)
Concepts 5	Identify the best estimate given for a sum or difference (S)
Concepts 7	Identify the symbol that tells the order of two products, one having a factor of zero (S)
Concepts 8	Identify the solution to an open subtraction or multiplication sentence (S)
Concepts 9	Identify the solution to an open subtraction or multiplication sentence (S)
Concepts 10	Identify the next number in a sequence formed by adding a constant (S)
Concepts 11	Identify factors or multiples of a number (S)
Concepts 12	Identify factors or multiples of a number (S)
Concepts 15	Identify the fraction that names a quotient (S)
Concepts 20	Identify the sum that gives the meaning of a mixed number (S)
Concepts 22	Identify the place value of a digit in a 1- or 2-place decimal (S)
Concepts 26	Identify a diameter of a circle (S)
Concepts 28	Identify the perimeter of a geometric figure (S)
Concepts 30	Identify the volume of a space figure comprised of cubes and/or portions of cubes (S)

23 Grades 4 and 5 - SRA Test Level E - Subtest Math

Objectives measured on SRA Test not included in the Basic Skills Booklet

SRA Item:	Objectives
Computation 21	Identify the quotient and remainder, if any, resulting from the division of a 3- or 4- digit number by a 2-digit number (S)
Computation 27	Identify the product of a whole number and an amount of money (S)
Computation 28	Identify the product of a whole number and an amount of money (S)
Computation 29	Identify the quotient resulting from the division of an amount of money by a whole number (S)
Computation 34	Identify the product of a decimal and a whole number

Objectives measured on SRA Test not included in the Basic Skills Booklet

SRA Item:	Objectives
Problem Solving 14	Identify the solution to a 1-step word problem involving fractions and requiring multiplication (S)
Problem Solving 15	Identify the solution to a multiple-step word problem involving whole numbers and/or money (S)
Problem Solving 16	Identify the additional information required to solve a word problem (S)
Problem Solving 17	Identify the additional information required to solve a word problem (S)
Problem Solving 27	Identify the solution to a word problem involving a rate (S)
Problem Solving 28	Identify the correct method for finding the solution to a 1-step word problem involving money and requiring subtraction (S)

6th and 7th Grade Mathematics

	BASIC SKILLS OBJECTIVE	SRA TEST MEASUREMENT	METHOD OF MEASUREMENT All Items are Multiple Choice
*1.1	Identify the place value of each digit in a six-digit number.	Concepts 1	Identify the place values of a digit in a numeral that has 8 or fewer digits.
*1.2	Identify the relationship between two or more six-digit numbers (greater than, less than, equal to).	Not Measured	
*1.3	Round numbers to the nearest 1000.	Concepts 2,4	Identify a numeral that represents rounding to the nearest hundred or thousand.
1.4	Read and write numbers to 1,000,000,000.	Not Measured	
*2.1	Add three or more five-digit numbers with regrouping.	Computation 1	Identify the sum of 3 or 4 whole numbers.
*2.2	Subtract any five-digit numbers with regrouping.	Computation 2,3	Identify the difference between two 5-digit numbers.
2.3	Analyze and solve multiple-step reading problems using addition and subtraction.	Problem Solving 1	Choose the solution to a word problem with extraneous information using addition and subtraction.
*2.4	Multiply a three-digit number by a two-digit number.	Computation 4,5,6,7	Identify the product of a 2 or 3 digit number by a 2 digit number.
2.5	Multiply a three or more digit number by a three-digit number.	Computation 8	Identify the product of a 3 digit number by a 3 digit number.
2.6	Divide a three or more digit number by any two-digit number (with or without a remainder).		Identify the quotient and remainder of a 3 or more digit number divided by a 2 digit number.

BASIC SKILLS OBJECTIVE	SRA TEST MEASUREMENT	METHOD OF MEASUREMENT All Items are Multiple Choice
2.7 Analyze and solve multiple-step reading problems using multiplication and division.	Problem Solving 4,8,10,19	Identify the solution to a multiple-step word problem using multiplication and/or division.
2.8 Name the greatest common factor of two numbers.	Concepts 8	Identify the greatest common factor of two numbers.
2.9 Name the least common multiple of two numbers.	Concepts 7	Identify the least common multiple of two numbers.
2.10 Identify prime and composite numbers.	Not Measured	
3.1 Find the least common denominator of two factors.	Not Measured	NOTE: (This skill, however, is required to do additional computation problems. See 3.4)
3.2 Order fractions with denominators of ten or less.	Concepts 11	Identify the appropriate symbol.
3.3 Add and subtract simple fractions having common denominators of 12 or less.	Not Measured NOTE:(Computation 28 measures this objective with denominators above 12)	Identify the sum of 2 fractions having a common denominator.
3.4 Add and subtract simple fractions and/or mixed numbers stating the difference in the simplest form.	Computation 28-35	Identify the sum or difference of two fractions or mixed numbers having unlike denominators.
3.5 Multiply simple fractions and/or mixed numbers, stating the product in the simplest form.	Computations 36-38	Identify the product of 2 fractions or mixed numbers.

	BASIC SKILLS OBJECTIVE	SRA TEST MEASUREMENT	METHOD OF MEASUREMENT All Items are Multiple Choice
3.6	Find the reciprocal of a fraction or whole number.	Not Measured	
3.7	Divide a whole number by a fraction, stating the quotient in the simplest form.	Computation 39	Identify the quotient of whole number divided by a fraction.
3.8	Divide a mixed number by a fraction, stating the quotient in the simplest form.	Computation 40	Identify the quotient of 2 fractions.
3.9	Analyze and solve a multiple-step reading problem using addition subtraction and multiplication of simple fractions and mixed numbers.	Problem Solving 11,17,24,26	Identify the solution to a 2-step word problem involving fractions.
*3.10	Add decimal fractions through thousandths.	Computations 18-20	Identify the sum of decimal fractions presented vertically or horizontally.
*3.11	Subtract decimal fractions through thousandths.	Computation 14,21,22	Identify the difference of 2 decimal fractions presented vertically or horizontally.
3.12	Multiply decimal fractions through thousandths by a one-digit number.	Computation 15,23	Identify the product of a decimal fraction times a 1-digit number presented vertically or horizontally.
3.13	Divide decimal fractions through thousandths by a one-digit number (without a remainder).	Computation 17,25	Identify the quotient of a decimal fraction divided by a 1-digit number presented vertically or horizontally.
3.14	Round off decimal fractions to the nearest whole number.	Not Measured	

BASIC SKILLS OBJECTIVE	SRA TEST MEASUREMENT	METHOD OF MEASUREMENT All Items are Multiple Choice
3.15 Analyze and solve a multiple-step reading problem using addition, subtraction, multiplication and division of decimal fractions through thousandths.	Problem Solving 5,6,7,9,12,13,16,20,21	Identify the solution to a multiple-step word problem using addition, subtraction, multiplication and division of decimal fractions.
*4.1 Measure different lengths using the customary or metric unit of measure.	Concepts 28	Identify the difference in the length of two line segments pictured next to a centimeter ruler.
4.2 Identify equivalencies within inches, feet, yards and miles (12 inches = 1 foot).	Not Measured	
4.3 Identify equivalencies within ounces, pounds and tons.	Not Measured	
4.4 Express capacity in liters and milliliters.	Not Measured	
4.5 Identify linear equivalencies using metric measures (10 mm = 1 cm).	Not Measured	
5.1 Identify similar congruent shapes.	Concepts 26	Identify figure congruent to a given figure.
*5.2 Identify center, diameter and radius of a circle.	Not Measured	
*5.3 Identify parallelograms and other quadrilaterals.	Not Measured	
5.4 Draw a circle, triangle, square, rectangle, parallelogram and one additional quadrilateral.	Not Measured	

	BASIC SKILLS OBJECTIVE	SRA TEST MEASUREMENT	METHOD OF MEASUREMENT All Items are Multiple Choice
6.1	Use a chart, table or graph to find information and interpret data.	Problem Solving 27,28	Identify the solution to a word problem involving a bar graph.
6.2	Organize and graph data.	Not Measured	
6.3	Predict the probability of an event.	Problem Solving 25	Identify the solution to a word problem involving probability.
6.4	Identify measures of central tendency-mean, median, mode.	Problem Solving 16	Identify the solution to a word problem involving an average (mean).

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Objectives measured on SRA Test not included in the Basic Skills Booklet

SRA Item:	Objectives
Concepts 3	Identify the standard numeral for a 5- or 6-digit number given in expanded form (S)
Concepts 5	Identify the solution to an open addition or subtraction sentence (S)
Concepts 6	Identify the next number in a sequence (S)
Concepts 9	Identify the prime factorization of a number less than 100 (S)
Concepts 10	Identify a fraction that is equivalent to a given fraction (S)
Concepts 12	Identify the fraction that is equivalent to a given mixed number (S)
Concepts 13	Identify the decimal that tells what part of a region is shaded (S)
Concepts 14	Identify the place-value of a digit in a 2-, 3-, or 4- place decimal (S)
Concepts 15	Identify the place-value of a digit in a 2-, 3-, or 4- place decimal (S)
Concepts 16	Identify the decimal that is equivalent to a given mixed number or fraction (S)
Concepts 17	Identify the fraction that is equivalent to a given decimal (S)
Concepts 18	Identify the symbol that tells the order of two decimals (S)
Concepts 19	Identify the solution to a proportion (S)
Concepts 20	Identify the decimal that is equivalent to a given percent (S)
Concepts 21	Identify the sum of a number and its additive inverse (S)
Concepts 22	Identify a linear equation with one variable that has a given number as its solution (S)
Concepts 23	Identify the solution to a linear equation with one variable (S)

Objectives measured on SRA Test not included in the Basic Skills Booklet

SRA Item:	Objectives
Concepts 24	Identify the meaning or value of a number raised to the second or third power (S)
Concepts 25	Identify the coordinates of a point on a coordinate place (S)
Concepts 27	Identify the true statement concerning whether a pair of lines is perpendicular or parallel, given other statements concerning such relationships among a set of three lines (S)
Concepts 29	Identify the degree measure of an angle pictured with a protractor (S)
Concepts 30	Identify the volume of a rectangular prism (S)
Computation 13	Identify the quotient and remainder, if any, resulting from the division of a 5-digit number by a 3-digit number (S)
Computation 16	Identify the product of a whole number and an amount of money (S)
Computation 26	Identify the quotient resulting from the division of a decimal by a decimal (S)
Computation 27	Identify the solution to an open sentence involving a percent (S)
Problem Solving 14	Identify the solution to a word problem involving a percent (S)
Problem Solving 22	Identify the solution to a word problem involving a scale drawing (S)
Problem Solving 23	Identify the solution to a word problem involving area (S)
Problem Solving 29	Identify the solution to a word problem involving a percent (S)
Problem Solving 30	Identify the solution to a word problem involving volume (S)

8th and 9th Grade Mathematics

BASIC SKILLS OBJECTIVE	SRA TEST MEASUREMENT	METHOD OF MEASUREMENT All Items are Multiple Choice
*1.1 Identify the place value of each digit in numerals with no more than seven digits.	Not Measured	
1.2 Write numerals in expanded notation.	Not Measured	
1.3 Write Numerals in scientific notation.	Not Measured	
*1.4 Round off numerals to the nearest tens, hundreds, up through millions place.	Concepts 3	Identify a numeral that represents rounding to the nearest hundred, thousand or million.
*2.1 Add and subtract whole numbers.	Computation 1	Identify the sum or difference of whole numbers presented horizontally or vertically.
*2.2 Multiply a three-digit whole number by a three-digit number.	Computation 2,3	Identify the product of a 2 or 3-digit number and a 3-digit number presented horizontally or vertically.
*2.3 Divide a five-digit whole number by a two-digit whole number.	Computation 4,5	Identify the quotient and remainder resulting from the division of up to a 5-digit number by a 1 or 2-digit number.
2.4 Evaluate numerical phrases with or without grouping symbols by using the rules for order of operation.	Not Measured	
*2.5 Estimate answers to whole number computation problems.	Not Measured	
*2.6 Solve reading problems involving one or two operations with whole numbers.	Problem Solving 2,7,8,14,15,17	Choose the solution to a multiple-step word problem involving whole numbers only that may require all operations.

BASIC SKILLS OBJECTIVE	SRA TEST MEASUREMENT	METHOD OF MEASUREMENT All Items are Multiple Choice
2.7 Identify examples of properties of addition and multiplication, such as commutative, associative, distributive, addition property of zero and multiplication property of one.	Not Measured	
2.8 Test whole numbers for divisibility by 2,3,5, and 10.	Concepts 1	Identify a number divisible by 2,3,5 or 10.
2.9 Identify numbers as prime or composite.	Not Measured	
2.10 Express a composite number as a product of prime factors.	Concepts 4	Identify the prime factorization of a number less than 200.
2.11 Express a product of like factors in exponential form.	Not Measured	
2.12 Write the standard name for a number expressed in exponential form.	Not Measured	
2.13 Find the square root to the nearest tenth of a whole number less than 150.	Concepts 19	Identify the square root of a number.
*2.14 Find the greatest common factor and least common multiple of two or three whole numbers with no more than two digits.	Concepts 5	Identify the greatest common factor of two 2-digit numbers.
*3.1 Change a fraction to an equivalent fraction with a given denominator which does not exceed two digits.	Concepts 12	Identify an equivalent form of a fraction.
*3.2 Order a set of fractions with denominators less than 10.	Not Measured (NOTE: Concepts 13 measures this objective, using denominators greater than 10.)	Identify the symbol that tells the order of 2 fractions with unlike denominators.

	BASIC SKILLS OBJECTIVE	SRA TEST MEASUREMENT	METHOD OF MEASUREMENT All Items are Multiple Choice
3.3	Find the reciprocal of a whole number or fraction.	Not Measured	
*3.4	Add, subtract and multiply fractions with denominators that do not exceed two digits.	Computation 21,22,25,26,28,29	Identify the solution to addition, subtraction and multiplication problems with denominators less than 3-digits, presented horizontally and/or vertically.
3.5	Divide fractions with denominators that do not exceed two digits.	Computation 31,32	Identify the quotient resulting from the division of 2 fractions.
3.6	Add, subtract, multiply and divide mixed numbers with denominators that do not exceed two digits.	Computation 23,27,30,33,24	Identify the solution to add, subtract and division problems with mixed numbers, presented horizontally and/or vertically.
3.7	Estimate answers to computation problems containing fractions.	Not Measured	
3.8	Represent a ratio as a fraction.	Concepts 10	Identify a fraction that is equivalent to a given ratio.
3.9	Solve a proportion when three parts are given.	Not Measured	
3.10	Solve reading problems using fractions and proportions.	Problem Solving 4,5,10,20,22,19	Choose the solution to a word problem that requires establishment of ratio and completion of proportion. Choose the solution to a multiple step word problem involving fractions.
3.11	Order a set of decimal fractions.	Concepts 8	Identify a list in which three decimals are in order from least to greatest.

BASIC SKILLS OBJECTIVE	SRA TEST MEASUREMENT	METHOD OF MEASUREMENT All Items are Multiple Choice
3.12 Round-off a decimal fraction to the nearest whole number, tenth, hundredth and thousandth.	Concepts 9	Identify the approximation of a 3,4 or 5 place decimal fraction to the nearest tenth, hundredth or thousandth.
*3.13 Change a decimal fraction to a common fraction.	Not Measured	
*3.14 Change a common fraction with a two-digit denominator to a decimal fraction.	Concepts 14,15	Identify the decimal that is equivalent to a given fraction.
*3.15 Add and subtract decimal fractions.	Computation 9-13	Identify the sum of two or more decimal fractions presented horizontally. Identify the difference of two decimal fractions presented horizontally.
*3.16 Multiply a decimal fraction with three digits by a decimal fraction with three digits.	Computation 7, 14,15	Identify the product of 2 two or three digit decimal fractions presented horizontally or vertically.
3.17 Divide a decimal fraction with five digits by a decimal fraction with two digits.	Computation 8,16,17	Identify the quotient resulting from the division of a five digit decimal fraction by a 2-digit decimal fraction, presented in linear or standard form. (÷, ⟌)
3.18 Write decimal fractions in scientific notation.	Not Measured	
3.19 Estimate answers to decimal fraction computation problems.	Not Measured	

BASIC SKILLS OBJECTIVE	SRA TEST MEASUREMENT	METHOD OF MEASUREMENT All Items are Multiple Choice
*3.20 Solve consumer type reading problems which require use of decimal fractions.	Problem Solving 1,16	Choose the solution to a multiple-step word problem involving decimal fractions relative to consumer issues.
3.21 Solve other types of reading problems which require use of decimal fractions.	Problem Solving 11,25,26,27,29	Choose the solution to a multiple-step word problem involving decimal fractions.
*3.22 Write a percent as a fraction and as a decimal.	Not Measured (NOTE: refer to 3.23)	
*3.23 Write a decimal fraction as a percent and write a common fraction with a denominator of no more than two digits as a percent.	Concepts 11	Identify the percent that is equivalent to a given decimal fraction.
3.24 Solve a percent problem using a proportion.	Problem Solving 9,21	Choose the solution to a multiple-step word problem using proportion.
*3.25 Solve consumer type reading problems that contain percents.	Measured in *3.24	NOTE: Use of proportion to solve percentage problems.
3.26 Solve other types of reading problems involving percents.	Except for items already identified, other types of percentage problems are not measured in this test.	
*4.1 Estimate and determine measurements of time, temperature, length, capacity and mass using both customary and metric units.	Not Measured	
4.2 Estimate and determine measurements of area using both customary and metric units.	Not Measured	

BASIC SKILLS OBJECTIVE	SRA TEST MEASUREMENT	METHOD OF MEASUREMENT All Items are Multiple Choice
*4.3 Convert from one unit of measure to another within the same system.	Not Measured	
4.4 Perform computation problems involving time, temperature, length, capacity and mass using both customary and metric units.	Not Measured	
4.5 Solve reading problems involving units of measure.	Problem Solving 2,3,5,10,11,12,17, 22,25,26,27,30	Choose the solution to multiple-step word problems involving units of measurement.
*5.1 Recognize circles, triangles, quadrilaterals, and octagons.	Not Measured	
5.2 Recognize other two and three-dimensional geometric figures and relations including parallel lines, perpendicular lines, angles, pentagons, hexagons, cubes, rectangular solids, pyramids, cones, cylinders and spheres.	Not Measured	
5.3 Recognize congruent and similar geometric figures.	Concepts 26,27	Identify the figure that is similar or congruent to a given figure.
5.4 Identify line symmetry properties in geometric figures.	Not Measured	
5.5 Measure an angle.	Concepts 27	Identify the measure of an angle.

BASIC SKILLS OBJECTIVE	SRA TEST MEASUREMENT	METHOD OF MEASUREMENT All Items are Multiple Choice
5.6 Use angle relationships in geometric figures.	Concepts 30	Given that one angle of a triangle is a right angle, identify properties of a right triangle.
5.7 Find the perimeter and area of polygons.	Problem Solving 12	Choose the solution to a word problem involving area.
5.8 Find the circumference and area of a circle.	Concepts 28	Identify the circumference (area) of a circle.
5.9 Find the volume of cubes, rectangular solids and cylinders.	Concepts 29 Problem Solving 30	Identify the volume of a rectangular solid. Choose the solution to a multiple-step word problem determining volume.
5.10 Solve reading problems involving geometric figures.	Problem Solving 12,30	Choose the solution to multiple step word problems involving geometric figures.
*6.1 Read and interpret charts, tables and graphs.	Problem Solving 24,25	Choose the solution to a multiple-step word problem involving interpretation of data from a graph.
6.2 Find the probability and/or odds of an event.	Problem Solving 23,28	Identify the probability of an event with data presented in a word problem.
6.3 Organize a collection of data and look for pattern development.	Concepts 6	Identify the next number from a given pattern.
6.4 Construct a line, bar, circle and pictograph.	Not Measured	

BASIC SKILLS OBJECTIVE	SRA TEST MEASUREMENT	METHOD OF MEASUREMENT All Items are Multiple Choice
6.5 Identify measures of central tendency-median and mode of a set of numbers.	Problem Solving 17,18	Choose the solution to a word problem involving the use of average (mean)
6.6 Solve reading problems involving probability and statistics.	Problem Solving 23,28	Refer to 6.2
7.1 Identify the set of integers.	Not Measured	
7.2 Order a set of integers.	Concepts 17	Choose the symbol that indicates the proper order of two integers.
7.3 Determine the absolute value of an integer.	Not Measured	
7.4 Add, subtract, multiply and divide integers.	Computation 34-40	Identify the solution to addition, subtraction, multiplication and division problems using integers.
7.5 Identify the additive inverse of an integer.	Concepts 16	Identify the solution to an open sentence involving the sum of a number and its additive inverse.
7.6 Find and graph the solution sets of simple equations and inequalities containing one variable.	Concepts 20-23	Identify the solution to equations or inequalities containing one variable.
7.7 Solve reading problems which require using a set of integers.	NOTE: Problem Solving is limited to non-negative integers.	

Grades 8 and 9 - SRA Test Level G - Subtest Math

Objectives measured on SRA Test not included in the Basic Skills Booklet

SRA Item:	Objectives
Concepts 7	Identify the place value of a digit in a 4- or 5-place decimal (S)
Concepts 18	Identify the value of a number raised to a power (S)
Concepts 24,25	Identify the point of a coordinate plane named by a given ordered pair (S)
Computation 6	Identify the quotient and remainder, if any, resulting from the division of a 4-digit number by a 3-digit number (S)
Computation 18	Identify the solution to an open sentence involving a percent (S)
Computation 19	Identify the number that is a given percent of a given number (S)
Computation 20	Identify the number that is a given percent of a given number (S)
Problem Solving 6	Identify the additional information required to solve a word problem (S)

	BASIC SKILLS OBJECTIVE	SRA TEST MEASUREMENT	FORMAT All items measured by multiple choice questions
1.1	Demonstrate continued growth in sight vocabulary.	Vocabulary 1-40	Identify sight vocabulary.
*1.2	Use context clues to identify a new word in a sentence.	Vocabulary 1-40	Choose the word/words that have about the same meaning as the underlined word/words in the sentence.
*1.3	Develop a knowledge of compound words through usage.	Measured in lower levels.	N/A
*1.4	Demonstrate knowledge of antonyms, synonyms, and homonyms through usage.	Vocabulary 1-15	Choose the word/words that have about the same meaning as the underlined word/words in the sentence.
*1.5	Identify words that are spelled alike but whose meaning can only be determined from context. (homograph)	Spelling 1-5 Vocabulary 22, 24, 25, 27	Read each phrase. The underlined word should be a word that sounds the same but is spelled differently. Decide which underlined word should be spelled differently.
*1.6	Maintain and strengthen the use of contractions.	Measured in language arts 16, 17, 12.	Decide which of the four choices should go in the blank.
*1.7	Demonstrate an understanding of forming plurals by adding "s", "es" and changing "y" to "i" and "f" to "v" before adding "es".	Measured in lower levels.	N/A

	BASIC SKILLS OBJECTIVE	SRA TEST MEASUREMENT	FORMAT All items measured by multiple choice questions
1.8	Strengthen the ability to decode words as presented in the instructional reading program.	Measured in lower levels.	N/A
*1.9	Identify changes in meaning of root words when prefixes and suffixes are added.	Measured in lower levels.	Identify incorrect addition of a prefix or suffix.
*2.1	Identify the main idea of a paragraph.	5, 30, 44	Student is given a question and must choose from four selections the appropriate answer.
*2.2	Identify facts directly stated in a paragraph as to who, what, when, why and how.	1, 2, 5, 6, 7, 8, 10, 11, 16, 17, 18, 19, 21, 23, 24, 25, 26, 27, 28, 30, 31, 32, 33, 34, 40, 41, 43, 44, 45, 46, 47, 48, 50	Student is given a question and must choose from four selections the appropriate answer.
*2.3	Read to locate specific information or to prove a point.	8, 9, 21, 22, 27, 31, 33, 34, 41, 42, 46	Student is given a question and must choose from four selections the appropriate answer.
*2.4	Identify the order of events in a given paragraph.	18, 23, 29	Student is given a question and must choose from four selections the appropriate answer.
*2.5	Identify the setting time and place stated within a selection.	46-50	Student is given a question and must choose from four selections the appropriate answer.
*2.6	Predict a logical outcome after reading a portion of a selection.	2, 16, 25, 40	Student is given a question and must decide from four choices the logical outcome.

	BASIC SKILLS OBJECTIVE	SRA TEST MEASUREMENT	FORMAT All items measured by multiple choice questions
*2.7	Draw a conclusion after reading a selection.	7, 10, 19, 26, 36, 2, 3, 11, 15, 16, 17, 26, 29, 32, 35, 36	Student is given a question and decides from four statements the appropriate conclusion.
2.8	Recognize facts that are implied but not stated.	1, 38, 50	Student is given a question and decides from four phrases the appropriate answer.
*2.9	Distinguish between fact and opinion.	6, 11, 32, 43	Student is given a question and decides frum four statements the appropriate answer.
*2.10	Distinguish between fiction and nonfiction.	46-50	Student is given a question and decides from four statements the appropriate answer.
2.11	Recognize words used to appeal to one or more of the five senses.	9, 16, 18	Student must select the word with the same meaning from four selections.
2.12	Describe the particular feeling expressed in a given passage.	6	Student is given a question and must decide from four phrases the feeling expressed.
2.13	Read a selection and indicate how the character(s) feel.	1, 50, 38	Student is given a question and must decide from four word/words the correct character feeling.
*2.14	Recognize the use of punctuation as a clue to meaning.	Measure in Language Arts #25 16-30	Student is to decide which of the four choices should go in the blank to make a correctly punctuated sentence.

4th Grade Reading

	BASIC SKILLS OBJECTIVE	SRA TEST MEASUREMENT	FORMAT All items measured by multiple choice questions
2.15	Recognize that words have multi-meanings and context must be a determining factor in choice of meaning.	1-40	Choose the word/words that has about the same meaning as the underlined word/words in the sentence.
*2.16	Identify cause and effect relationships.	4, 14, 15, 20, 29, 35, 37	Student must choose from four phrases the correct answer to complete the phrase.
2.17	Recognize and understand figurative language such as: a. Simile - a comparison using <u>like</u> or <u>as</u>. b. Metaphors - an implied comparison between two things. c. Idiom - a phrase or expression whose meaning cannot be understood from the common meaning of the word.	Not Measured	N/A
*2.18	Understand the use of special type (italics, bold face and all capital letters).	Measured in lower levels	N/A
*3.1	Follow oral and written instructions.	Not Measurable	N/A
3.2	Maintain and extend fluency in oral and silent reading.	Not Measurable	N/A
3.3	Extend the skill to skim for specific information.	Not Measurable	N/A

	BASIC SKILLS OBJECTIVE	SRA TEST MEASUREMENT	FORMAT All items measured by multiple choice questions
*3.4	Be able to use parts of a book to locate information.	+17-24 (Reference Section)	Student is given a question and must select from four word/words the appropriate answer.
	a. Title page		
	b. Table of Contents		
	c. Glossary		
	d. Index		
*3.5	Distinguish between the kind of information to be found in a dictionary and an encyclopedia.	+28-31 (Reference Section)	Student is given a question and must select from four selections the appropriate answers.
3.6	Perform the following dictionary skills:	(Reference Section)	
	a. Alphabetize a list of words	+1-3	Student is given a question or word and must select from four selections the appropriate answers.
	b. Use guide words to locate entry words	+4-6	
	c. Use pronunciation key	+7-9	
	d. Select definition to fit context	+10-12	
3.7	Locate needed information in:	(Reference Section)	
	a. Dictionary	+ 1-12	Student is given a question and must choose from four selections the appropriate answers.
	b. Encyclopedia	+ 13-16	
	c. Newspapers		
	d. Magazines		
	e. Telephone Directory		

BASIC SKILLS OBJECTIVE	SRA TEST MEASUREMENT	FORMAT All items measured by multiple choice questions
3.8 Interpret graphic materials using:	(Reference Section)	
a. Maps	+32-36	Student is given a question and must choose from four selections the appropriate answers.
b. Charts and tables	+37-40	
c. Diagrams	+ 32-36	
d. Illustrations and cartoons		
e. Graphs		

+ These items are measured in Reference Section of SRA.

5th Grade Reading

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	BASIC SKILLS OBJECTIVE	SRA TEST MEASUREMENT	FORMAT All items measured by multiple choice questions
1.1	Maintain and increase vocabulary as presented in all curriculum areas.	Not Measurable	N/A
*1.2	Identify and use antonyms, synonyms, and homonyms in context for continued vocabulary development.	Vocabulary 1-15	Student must choose a word that has the same meaning and the underlined word in the sentence.
1.3	Use contextual clues to decode unfamiliar words.	Vocabulary 1-40	Student must choose a word that has the same meaning and the underlined word in the sentence.
*1.4	Maintain and increase vocabulary through the expanded use of prefixes and suffixes.	Measured in lower level	N/A
1.5	Use the glossary and/or dictionary to aid in the pronunciation of unfamiliar words.	+ Reference Materials 7-9	Student must choose the word that is pronounced the same as the underlined dictionary spelling.
*2.1	State in sentence form comprehension the main idea of a paragraph or group of paragraphs.	Comprehension 5, 11, 30, 44	Student is given a question and must choose from four selections the correct answers.
*2.2	Read to recall specific information.	Comprehension 8, 9, 21, 22, 27, 31, 33, 34, 41, 42, 46	Student is given a question and must choose from four selections the correct answer.
*2.3	Recall a sequence of events in a given selection.	Comprehension 18, 23, 39, 40	Student is given a question and must choose from four selections the correct answer.

BASIC SKILLS OBJECTIVE		SRA TEST MEASUREMENT	FORMAT All items measured by multiple choice questions
*2.4	Continue the identification of the setting, time and place.	Comprehension 46-50	Student is given a question and must choose from four selections the correct answer.
*2.5	Provide a logical ending to an incomplete passage.	Comprehension 4, 14, 15, 20, 29, 35, 37, 40	Student is given a question and must choose from four selections the correct answer.
*2.6	Draw conclusions and make generalizations after reading a given passage.	Comprehension 3, 7, 10, 19, 26, 36	Student is given a question and must choose from four selections the correct answer.
*2.7	Identify facts that are implied but not stated.	Comprehension 1, 38, 50	Student is given a question and must choose from four selections the correct answer.
2.8	Distinguish between fact and opinion to make a judgement from statements that are read.	Comprehension 6, 11, 32, 43	Student is given a question and must choose from four selections the correct answer.
*2.9	Describe the sensory images that the written word portrays.	Vocabulary 9, 16, 18	Student is given a question and must choose from four selections the correct answer.
*2.10	Describe the mood and emotion expressed in a given passage.	Comprehension 1, 38, 50	Student is given a question and must choose from four selections the correct answer.
2.11	Recognize and identify those character traits that are revealed within the story.	Not Measured	N/A
*2.12	Apply the understanding of punctuation marks as a clue to meaning.	Language Arts	Student is to decide which of the four choices should go in the blank to make a correctly punctuated sentence.

BASIC SKILLS OBJECTIVE	SRA TEST MEASUREMENT	FORMAT All items measured by multiple choice questions
*2.13 Use contextual clues in a given selection to choose the appropriate meaning of a multi-meaning word.	Vocabulary 1-40	Student must choose word/words that have about the same meaning as the underlined word/ words in the sentence.
*2.14 Recognize words and/or phrases that demonstrate cause and those that demonstrate effect in a given reading passage.	Comprehension 4, 14, 29, 35, 49	Student is given a question and must choose from four selections the correct answer.
2.15 Recognize and understand figurative language such as:	Not Measured	
a. Simile - a comparison using like or as.		
b. Metaphor - an implied comparison between two things.		
c. Idium - a phrase or expression whose meaning cannot be understood from the common meaning of the word.		
d. Personification - the giving of life-like qualities to an inanimate object.		
*3.1 Follow oral and written instructions.	Not Measurable	N/A
3.2 Use parts of a book to locate information:	+ Reference Materials 7-24	
*a. Title page	4-6	
*b. Table of contents		
*c. Glossary		
*d. Index		
e. Bibliography		

BASIC SKILLS OBJECTIVE	SRA TEST MEASUREMENT	FORMAT All items measured by multiple choice questions
*3.3 Extend the following dictionary skills:	+Reference Materials	Student is given a question and must choose from four selections the correct answer.
a. Alphabetize a list of words	1-3	
b. Use guide words to locate entry words.	4-6	
c. Use pronunciation key.	7-9	
d. Select definition to fit context.	10-12	
3.4 Locate needed information from various sources such as:	+Reference Materials 28-31	Student is given a question and must choose from four selections the correct answer.
*a. Dictionary		
*b. Encyclopedia		
*c. Telephone directory		
d. Newspapers		
e. Magazines		
f. Atlas		
g. Almanac		
3.5 Interpret graphic materials using:	+Reference Materials	N/A
*a. Maps	32-36	
*b. Charts and tables	37-40 32-36	
*c. Diagrams		
d. Illustrations and cartoons		
*e. Graphs		

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BASIC SKILLS OBJECTIVE	SRA TEST MEASUREMENT	FORMAT All items measured by multiple choice questions
3.6 Use outlining as a study aid:	Not Measured	
*a. Main topic		
*b. Sub-topic		
3.7 Summarize by recalling and organizing information.	Not Measured	
3.8 Adjust reading rate according to purpose or difficulty of material:	Not Measurable	
a. Skim the selection		
b. Scan the selection		
c. Read the selection for details		

6th and 7th Grade Reading

	BASIC SKILLS OBJECTIVE	SRA TEST MEASUREMENT	METHOD OF MEASUREMENT All Items are Multiple Choice
*1.1	Maintain and master vocabulary presented in all curriculum areas.	Vocabulary 16-20	Items test vocabulary by showing a sentence with an underlined word or phrase. Students must choose which of 4 alternative words or phrases have about the same meaning as the underlined word or phrase.
*1.2	Maintain and expand vocabulary through the usage of antonyms, homonyms and synonyms.	Vocabulary 1-15	
1.3	Use contextual sense to decode words unfamiliar in print.	Vocabulary 21-40	
*1.4	Maintain and increase vocabulary through the expanded use of prefixes or suffixes.	Measured at lower level	
*1.5	Demonstrate the continued use of the glossary and/or dictionary to aid in the pronunciation of unfamiliar words.	+Measured in reference material	
			NOTE: Items in the comprehension section (1-50), test student understanding by presenting a series of passages with items directed to information contained in passages. Students must choose from 4 alternatives the best answers.
*2.1	State in sentence form the main idea of a selection in which the main idea is directly stated or implied.	4,12,16,22,34,42	Select from four alternatives the main idea of a given passage.
*2.2	Read to recall significant facts, details, and descriptions.	11,13,18,24,27,38,48	Select the correct answer to what, where, when, and how questions after reading a passage.

6th and 7th Grade Reading

	BASIC SKILLS OBJECTIVE	SRA TEST MEASUREMENT	METHOD OF MEASUREMENT All Items are Multiple Choice
*2.3	Continue to identify the setting, time and place.	11,13,18,24,27,38,48	Select the correct answer to where and when questions.
*2.4	Recall sequence of events in a story.	2,8,35,43	Select the correct answer to ordinal questions.
*2.5	Determine the logical outcome to an incomplete story.	7,40	Select the most predictable outcome based on the information in a passage.
*2.6	Draw conclusion or inference to make generalization after reading a selection.	9,19,25,29,33,36,37,45	Use the information in a passage to select the best answer about alternative conclusions or suppositions.
*2.7	Analyze a given selection to find the hidden meaning by identifying what is implied.	3,10,14,23,31,49	After reading a passage select the author's purpose.
*2.8	Differentiate between statements of certainty and probability and make judgments from statements read.	3,10,31,49	After reading a passage determine which statements are factual and which are imaginary.
*2.9	Evaluate the sensory images portrayed in written words.	44,50	Study a poem; develop an awareness and identify poetic metaphors, expressions of feelings, and poetic descriptions.
2.10	Analyze the feeling, mood and emotion expressed in a given story.	5,31-36,44-50	Study the descriptive words in a passage to determine conditions and personal traits that are described.
2.11	Analyze the traits and motives of the characters in a given story.	1,19	Select the correct description of what type of people are found in a given passage.

6th and 7th Grade Reading

	BASIC SKILLS OBJECTIVE	SRA TEST MEASUREMENT	METHOD OF MEASUREMENT All Items are Multiple Choice
*2.12	Continue to apply an understanding of punctuation marks in material read as clues to meaning.	Not Measured	
*2.13	Use contextual clues in a given selection to choose appropriate meaning of a familiar or unfamiliar multi-meaning word.	15,18,37	Select the correct meaning for a word by studying the context in which it is used.
*2.14	Recognize words and/or phrases that demonstrate cause and those that demonstrate effect in a given selection.	1,20,26,30,39,46	Use <u>because</u> as a clue for finding words that demonstrate cause; look for <u>what happens</u> as a clue for effects.
2.15	Recognize and interpret the figures of speech.	15,29,40	From given passages, students will be asked to select similes, metaphors, idioms, personifications and alliterations.
*3.1	Follow oral and written directions.	Measured at lower levels	
*3.2	Use parts of a book to locate information.	+Reference materials 14-18	Use the table of contents and index to answer questions about locating specific information.
*3.3	Dictionary Skills.	+Reference 1-9	Use guide words, pronunciation key and selection of correct word meaning.
3.4	Locate information from varied sources.	+Reference 1-13,23-28	Use dictionary, textbooks, encyclopedia and card catalog to locate specific topics.

	BASIC SKILLS OBJECTIVE	SRA TEST MEASUREMENT	METHOD OF MEASUREMENT All Items are Multiple Choice
*3.5	Interpret graphic materials.	+Reference 29-40	Use maps, charts and graphs to answer specific questions.
*3.6	Extend ability to use outlining as a study aid.	Not Measured	
3.7	Summarize by recalling, listing and organizing information.	Not Measured	
3.8	Develop the ability to adjust reading rate to reading purpose or difficulty of material.	Not Measured	

+Reference material scores are not computed in the composite SRA score.

8th and 9th Grade Reading

BASIC SKILLS OBJECTIVE	SRA TEST MEASUREMENT	METHOD OF MEASUREMENT All Items are Multiple Choice
*1.1 Demonstrate mastery of previous taught skills.	Not Measurable	N/A
*1.2 Recognize words in print and independently identify the acceptable dialectic pronunciation and meaning of unfamiliar words.	Vocabulary 1-40	Items test vocabulary by showing a sentence with an underlined word or phrase. Students must choose which of the alternative words or phrases have about the same meaning as the underlined word or phrase.
*1.3 Apply the principles of context analysis, phonic analysis, structural analysis and/or dictionary skills.	+Reference 1-8	Same as above
*1.4 Demonstrate mastery of the specialized vocabulary and the technical vocabulary peculiar to the various content areas.	Measured in social studies and science	
		NOTE: Items in the comprehension section (1-50), test student understanding by presenting a series of passages with items directed to information contained in passages. Students must choose from 4 alternatives the best answers.
*2.1 Recognize, recall and infer main ideas and details.	Comprehension 1,10,13,14,16,19,22,24, 25,31,34,40,41,44,46,50	Students must choose the phrase that states the main idea.
*2.2 Recognize, recall and infer sequence.	18,38	Students must choose the correct sequence of events.

8th and 9th Grade Reading

	BASIC SKILLS OBJECTIVE	SRA TEST MEASUREMENT	METHOD OF MEASUREMENT All Items are Multiple Choice
*2.3	Recognize, recall and infer relationships and comparisons.	2,3,5,21,28,34,35	Students will choose the correct response to questions that ask how, why or the cause.
*2.4	Infer, anticipate and predict outcomes.	4,5,12,14,23,26,29,36,39	Students will choose the appropriate response to questions of predicting the outcome or anticipating what will happen.
*2.5	Infer, literal meanings for figurative language.	Vocabulary 29-40	Students will select meanings of similes, metaphors, idioms, personifications, and alliterations.
*3.1	Judge reality from fantasy.	Comprehension 12,13,14,16,19,28,47	Students will determine which statements are facts and which are imaginary.
*3.2	Ascertain facts from opinions.	36,42	Students will determine which statements are factual and which are opinion.
*3.3	Recognize propaganda and bias.	17,35,37,42,43	Students will determine which statements contain propaganda and bias.
*3.4	Determine authors purpose.	6,9,39	Students must choose the correct purpose of the selected passage.
*3.5	Evaluate the author's qualification.	Not Measured	
*3.6	Judge the adequacy of the appropriateness of the materials.	Not Measured	
*3.7	Judge worth, desirability and acceptability of selection.	Not Measured	

	BASIC SKILLS OBJECTIVE	SRA TEST MEASUREMENT	METHOD OF MEASUREMENT All Items are Multiple Choice
*3.8	Evaluate the development of characterization.	Not Measured	
*5.1	Apply dictionary skills.	+Reference 1-8	Use pronunciation key and dictionary page for prof ciency in using guide words, alphabetizing, pronunciation, meaning and etymology
*5.2	Locate information from various sources.	+Reference 9-28	Use textbooks, card catalog and Readers Guide to Periodical Literature to locate specific information.

+Reference items are measured in Reference Section (not included in composite score).

4th and 5th Grade - Language Arts Subtest

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SRA TEST - LEVEL E

OBJECTIVE	SRA TEST MEASUREMENT	METHOD OF MEASUREMENT All Items are Multiple Choice
1. Capitalization: Select the portion of a sentence that contains a capitalization error. Skills include capitalization of: a. First word of a sentence b. First word of direct discourse c. Pronoun I d. Name of animal e. Name of political division, public place, structure, school or educational institution f. Name of thoroughfare g. Name of person h. Name of literary or musical work i. Calendar designation	1-15	Items show a whole sentence divided into sections. Students must identify which section has incorrect use of capitals.
2. Punctuation: Select the correctly punctuated word or phrase to complete a sentence. Skills tested include: a. Period at end of declarative sentence b. Question mark at end of interrogative sentence c. Period with abbreviations d. Period with name initials e. Commas with word in a series f. Commas with city and state g. Commas with dates h. Apostrophes with contractions i. Apostrophes with possessive nouns j. Quotations marks with direct discourse k. Quotation with exclamation point	16-30	Items test punctuation skills by showing a sentence with a blank space. Students must choose which of 4 alternative phrases shows the correct punctuation.

4th and 5th Grade - Language Arts Subtest

SRA TEST - LEVEL E

OBJECTIVE	SRA TEST MEASUREMENT	METHOD OF MEASUREMENT All Items are Multiple Choice
3. Usage:	Items 5,10,11-14,16-18,20	Items test verb usage by showing a sentence with a blank space. Students must choose which of the four alternatives contain the correct verb form.
A. Verbs Select the verb or auxiliary verb that will correctly complete a sentence. Verb tenses include: past tense; present perfect tense; past perfect tense and modal auxiliary.		
B. Pronouns and Modifiers Select the pronoun and/or modifiers that will complete the sentence correctly. These forms include: personal pronouns, reflexive pronouns, demonstrative pronouns, relative pronouns, intensive pronouns, adjectives and adverb.	Items 1-4,6-9,15,19	Items test pronoun/modifiers usage by showing a sentence with a blank space. Students must choose which of the four alternatives contain the correct pronoun, adjective or adverb.
C. Clarity of Expression Select the word or phrase that will complete a sentence most clearly and concisely.	Items 21-24	Items test sentence completion by requiring students to choose the phrase, from four alternatives, that clearly and concisely fits.
D. Sentence Structure Select a phrase that will correctly complete a sentence.	Items 25-28	Items test completeness by showing a sentence with a blank space. The student must choose which of the 4 alternative phrases correctly complete the sentence.
Select the combining sentence in which modifiers are correctly placed.	Items 29-32	

4th and 5th Grade - Language Arts Subtest

SRA TEST - LEVEL E

OBJECTIVE	SRA TEST MEASUREMENT	METHOD OF MEASUREMENT All Items are Multiple Choice
cont.		Items test identification of misplaced modifiers. Students are asked to select from 4 alternative sentences the one that correctly says what the stimulus sentence says.
E. Sentence Transformations Select the word or group of words that will make a sentence mean the same as a given sentence. These operations include the selection of a conjunction that will make an alternate sentence express: the same time relationship; the same causation, result, contingency or exception; the same direct discourse; the same negation as a given sentence.	Items 33-40	Items test understanding and application. Two sentences with the same meaning are given; the second one is incomplete and the student must choose the correct words (from four alternatives) to complete it.
4. Spelling	Items 1-5	
A. Homophones Select the phrase with an incorrect choice of homophone. (According to context clues)		Items show four phrases, each containing an underlined word. Students must identify the phrase containing the underlined word that is spelled incorrectly.
B. Affixies Select the affixed word that is spelled incorrectly (suffixies, plural nouns, infliced verbs)	Items 8,17-19,21	
C. Graphemes Select the word that contains an incorrect vowel or consonant choice.	Items 6,7,11-13, 15, 16,20,22,26,28-30	

4th and 5th Grade - Language Arts Subtest

SRA TEST - LEVEL E

OBJECTIVE	SRA TEST MEASUREMENT	METHOD OF MEASUREMENT All Items are Multiple Choice
D. Mixed Errors Select the word that contains a transposition or reflects an incorrect or variant pronunciation.	Items 9,10,14,23-25,27	

6th and 7th Grade - Language Arts Subtest

SRA TEST - LEVEL F

OBJECTIVE	SRA TEST MEASUREMENT	METHOD OF MEASUREMENT All Items are Multiple Choice
1. Capitalization: Select the portion of a sentence that contains a capitalization error. Skills include capitalization of: a. First word of a sentence b. First word of a direct quotation c. Proper adjective d. Name of a person e. Name of an animal f. Name of political division, public place, structure, school or educational institution g. Name of thoroughfare h. Name of organization i. Title of person j. Historical term k. Calendar designation NOTE: Also includes: Identify a term that should not be capitalized.	1-15	Items show a whole sentence divided into four sections. Students must identify which section has incorrect use of capitals.
2. Punctuation: Select the correctly punctuated word or phrase to complete a sentence. Skills tested include: a. Period at end of declarative sentence b. Question mark at end of interrogative sentence c. Period with abbreviations d. Commas with words in a series e. Commas with city and date f. Commas with dates	16-30	Items test punctuation skills by showing a sentence with a blank space. Students must choose which of 4 alternative phrases shows the correct punctuation.

OBJECTIVE	SRA TEST MEASUREMENT	METHOD OF MEASUREMENT All Items are Multiple Choice
g. Commas with direct quotations h. Apostrophes with contractions i. Apostrophes with possessive nouns j. Quotation marks with direct discourse k. Indirect discourse that is correctly punctuated l. Correct placement of quotation mark and exclamation point in direct discourse		
3. Usage:		
A. Verbs Select the verb or auxiliary verb that will complete a sentence correctly. Verb tenses include: past tense; present perfect tense; past perfect tense; future perfect tense; and, modal auxiliary.	Items 4,5,7-10,12,16,17	Items test verb usage by showing a sentence with a blank space. Students must choose which of the four alternatives contain the correct verb form.
B. Pronouns and Modifiers Select the pronoun and/or modifiers that will complete the sentence correctly. These forms include: personal pronouns, reflexive pronouns, possessive pronouns, demonstrative pronouns, relative pronouns, intensive pronouns, adjective and adverbs.	Items 1-3,6,11,13-15,18	Items test pronoun/modifiers usage by showing a sentence with a blank space. Students must choose which of the four alternatives contain the correct pronoun adjective.
C. Clarity of Expression Select the word or phrase that will complete a sentence most clearly and concisely.	Items 19-24	Items test sentence completion by requiring students to choose the phrase, from four alternatives that clearly and concisely fits.

6th and 7th Grade - Language Arts Subtest

SRA TEST - LEVEL F

OBJECTIVE	SRA TEST MEASUREMENT	METHOD OF MEASUREMENT All Items are Multiple Choice
D. Sentence Structure Select the phrase that will supply elements missing from a sentence.	Items 25-28	Items test sentence completion by showing a sentence with a blank space. The student must choose which of 4 alternative phrases correctly complete the sentence.
Select the sentence in which modifiers are correctly placed.	Items 29-32	Items test identification of misplaced modifiers. Students are asked to select from 4 alternative sentences the one that correctly says what the stimulus sentence says.
E. Sentence Transformations Select the word or group of words that will make a sentence mean the same as a given sentence. These operations include the section of a conjunction that will make an alternate sentence express: the same time relationship; the same causation, result, contingency, or exeption. This section also requires selection of indirect discourse to mean the same as direct discourse and selection of an alternate sentence to express negation.	Items 33-40	Items test understanding and application. Two sentences with the same meaning are given; the second one is incomplete and the student must choose the correct words (from 4 alternatives) to complete it.

4. Spelling

A. Homophones

6th and 7th Grade - Language Arts Subtest

SRA TEST - LEVEL F

OBJECTIVE	SRA TEST MEASUREMENT	METHOD OF MEASUREMENT All Items are Multiple Choice
Select the phrase with an incorrect choice of homophone. (According to context clues)	Items 1-5	Items test application of spelling skills by word recognition. Four phrases are given, each containing an underlined word. Students must identify the phrase containing the underlined word that is spelled incorrectly.
B. Affixes		
Select the affixed word that is spelled incorrectly (suffixes and plural nouns).	Items 9,19,22,27	
C. Graphemes		
Select the word that contains an incorrect vowel or consonant choice.	Items 6-8,10-17, 20, 21,23-25,28,29	
D. Mixed Errors		
Select the word that contains a transposition or that reflects an incorrect or variant pronunciation.	Items 18,26,30	

8th and 9th Grade - Language Arts Subtest

SRA TEST - LEVEL G

OBJECTIVE	SRA TEST MEASUREMENT	METHOD OF MEASUREMENT All Items are Multiple Choice
1. Capitalization Select the portion of a sentence that contains a capitalization error. Skills include capitalization of: a. First word of direct discourse b. Proper adjective c. Name of topographical feature d. Name of organization e. Title of person f. Title of literary or musical work g. Religious term NOTE: Also includes identification of a term that should not be capitalized.	Items 1-15	Items show a whole sentence divided into sections. Student must identify which section has incorrect use of capitals.
2. Punctuation Select the correctly punctuated word or phrase to complete a sentence. Skills tested include: a. Question mark at end of interrogative sentence b. Commas with words in a series c. Commas with city and state d. Commas with introductory adverbial phrase e. Commas with parenthetical adverbial phrase f. Commas with words in apposition g. Commas with independent clauses joined by a conjunction h. Commas with dependent clauses i. Apostrophes with contractions j. Apostrophes with possessive nouns k. Correctly and incorrectly punctuated direct discourse	Items 15-30	Items test punctuation skills by showing a sentence with a blank space. Students must choose which of 4 alternative phrases show the correct punctuation.

OBJECTIVE	SRA TEST MEASUREMENT	METHOD OF MEASUREMENT All Items are Multiple Choice
3. Usage		
A. Verbs		
Select the verb or auxiliary verb that will complete a sentence correctly. Verb tenses include: present; past; present perfect; past perfect and modal auxiliary.	Items 2-5, 10,11,15,16	Items test verb usage by showing a sentence with a blank space. Students must choose which of the four alternatives contain the correct verb form.
B. Pronouns and Modifiers		
Select the pronoun, adjective, or adverb that will complete a sentence correctly. The forms include: personal pronouns, reflexive pronouns, demonstrative pronouns, relative pronouns, intensive pronouns, adjectives and adverbs.	Items 1,6-9,12-14	Items test pronoun/modifiers usage by showing a sentence with a blank space. Students must choose which of the four alternatives contain the correct pronoun, adjective or adverb.
C. Clarity of Expression		
Select the word or phrase that will complete a sentence most clearly and concisely.	Items 17-24	Items test sentence completion by requiring students to choose the phrase, from four alternatives that clearly and concisely fits.
D. Sentence Structure		
Select the phrase that will supply elements missing from a sentence.	Items 25-28	Items test sentence completion by showing a sentence with a blank space. The student must choose which of 4 alternative phrases correctly complete the sentence.

OBJECTIVE	SRA TEST MEASUREMENT	METHOD OF MEASUREMENT All Items are Multiple Choice
Select the sentence in which modifiers are correctly placed.	Items 29-32	Items test identification of misplaced modifiers. Students are asked to select from 4 alternative sentences the one that correctly says what the stimulus sentence says.
E. Sentence Transformations		
Select the word, or group of words that will make a sentence mean the same as a given sentence. These operations include the selection of a conjunction that will make an alternative sentence express: the same time relationship; the same causation, result, contingency, or exception. This section also requires selection of indirect discourse to mean the same as direct discourse, and selection of an alternative sentence to express negation.	Items 33-40	Items test understanding and application. Two sentences with the same meaning are given; the second one is incomplete and the student must choose the correct words (from 4 alternatives) to complete it.
4. Spelling		
A. Homophones		
Select the phrase with an incorrect choice of homophone (according to context clues).	Items 1-5	Items test application of spelling skills by word recognition. Four phrases are given, each containing an underlined word. Students must identify the phrase containing the underlined word that is spelled incorrectly.

8th and 9th Grade - Language Arts Subtest

SRA TEST - LEVEL G

OBJECTIVE	SRA TEST MEASUREMENT	METHOD OF MEASUREMENT All Items are Multiple Choice
B. Affixes		
Select the affixed word that is spelled incorrectly (suffixes and plural nouns).	Items 10,12,23,25	
C. Graphemes		
Select the word that contains an incorrect vowel or consonant choice.	Items 6,7,9,11,13,16-19, 20-22,26-30	
D. Mixed Error		
Select the word that contains a transposition or that reflects an incorrect or variant pronunciation.	Items 8,14,15,19,24	

VII. Congruence Between Desired Curriculum and the "Real" Curriculum

Another essential component of devising a curriculum that reflects what is being taught and what is being assessed, is the analysis of the match between stated objectives and the "real" curriculum.

We define the "real" curriculum as that which is actually taught to students in the classroom. When there is deviation in what is taught, and how much time is spent on areas of instruction, then a single measurement can produce results which do not match the desired curriculum. Testing will indicate to schools the extent to which the content that was taught to students was indeed learned by students.

Classroom teaching and the content that the teacher spends time teaching indicates the "real" curriculum. A way to analyze the content taught in the classroom is to use instruments (or maps) to determine the curriculum.

These maps indicate what is taught and how much time is spent on each area or objective (time-on-task).

When this data is compiled, it helps a school district, or a teacher, to identify the objectives that may be currently taught, but not assessed; and those objectives that are assessed, but not taught.

Mapping also provides direction to teachers in how to prioritize what they teach and how they identify time-on-task.

The following sample is an assessment based on one level of content derived from the Basic Educational Skills book.

Once a teacher has indicated what he/she is teaching, then the data can be analyzed to provide feedback to the teacher to help match the desired curriculum to the actual curriculum.

The importance of instruments such as this is to make teachers aware that the actual curriculum, the time allotted to deliver it, and the desired curriculum and its assessment, must match.

6th and 7th Grade Mathematics

SAMPLE

BASIC SKILLS SURVEY

BASIC SKILLS OBJECTIVE	DIRECTLY TAUGHT	AMOUNT OF INSTRUCTIONAL TIME (in hours)
1.1 Place value	_____	_____
1.2 Relationship of numbers	_____	_____
1.3 Rounding	_____	_____
1.4 Write numbers to 1,000,000,000	_____	_____
2.1 Add five-digit numbers	_____	_____
2.2 Subtract five-digit numbers	_____	_____
2.3 Multiple-step reading problem	_____	_____
2.4 Multiply three-digit by two-digit	_____	_____
2.5 Multiple three-digit by three-digit	_____	_____
2.6 Divide three-digit by two-digit	_____	_____
2.7 Multiple-step reading problems	_____	_____
2.8 Greatest common factor	_____	_____
2.9 Least common multiple	_____	_____
2.10 Prime and composite numbers	_____	_____
3.1 Least common denominator	_____	_____
3.2 Order fractions	_____	_____
3.3 Add and subtract simple fractions	_____	_____
3.4 Add and subtract simple fractions and mixed numbers	_____	_____
3.5 Multiply simple fractions and mixed numbers	_____	_____
3.6 Reciprocal of fraction or whole number	_____	_____

SAMPLE

BASIC SKILLS SURVEY

BASIC SKILLS OBJECTIVE		DIRECTLY TAUGHT	AMOUNT OF INSTRUCTIONAL TIME (in hours)
3.7	Divide whole number by fraction	_____	_____
3.8	Multiple-step reading problems	_____	_____
3.9	Add decimal fractions	_____	_____
3.10	Subtract decimal fractions	_____	_____
3.11	Multiply decimal fractions	_____	_____
3.12	Divide decimal fractions	_____	_____
3.13	Round decimal fractions	_____	_____
3.14	Multiple-step reading problems	_____	_____
4.1	Measure length	_____	_____
4.2	Identify equivalencies	_____	_____
4.3	Identify equivalencies	_____	_____
4.4	Express capacity	_____	_____
4.5	Linear equivalencies	_____	_____
5.1	Congruent shapes	_____	_____
5.2	Identify parts of circle	_____	_____
5.3	Identify quadrilaternals	_____	_____
5.4	Draw geometric shapes	_____	_____
6.1	Using graphics	_____	_____
6.2	Organize and graph chart	_____	_____
6.3	Predict probability	_____	_____
6.4	Measures of central tendency	_____	_____

VIII. Teaching to the Objective

Once instructional objectives have been identified, and the method of assessing those objectives have been identified, then the task of the teacher is to structure learning activities in the classroom to directly relate to them.

This implies that for each objective the materials, methods and evaluation used in the classroom will enable students to attain the desired performance. This student performance will not only be assessed in the classroom situation, but also on the SRA tests and the minimum performance tests.

In order for classroom teaching to be effective and relevant, it is necessary that each objective be analyzed in terms of student behaviors and learnings.

Care must be taken to insure that textual and supplementary materials directly relate to these stated behaviors and outcomes.

While there are many ways to measure one behavior, teachers should structure at least one of their classroom assessments to match the way in which a learning is measured by standardized instruments.

The following are examples of lesson plans that are modeled after the Program for Effective Teaching. PET is one program that has been identified by the State as a method to teach for effectiveness and relevancy. It is a model that reinforces teacher behavior in teaching to an objective. These examples of lesson plans indicate how the teaching to an objective can be directly related to the goals of the Basic Educational Skills book and the SRA test measurement.

Also included are examples of how textual and supplementary materials can be selected that relate directly to stated objectives.

It should be noted that the objective given for each plan relates directly to a stated Basic Skills objective, as well as the SRA items or items that will measure pupil performance.

LESSON PLAN

6th and 7th Grade Mathematics

Basic Educational Skill
Reference 3.10
(Add decimal fractions through thousandths)

SRA Test Measurement:
Computation 18-20

Objective: Given two or more decimal fractions through thousandths; students will be able to compute the sum and choose the correct answer from a list of five numbers.

Task Analysis:

1. Can students properly align addends?
2. Can students compute numerical sum?
3. Can students place decimal point in proper place in sum?
4. Can students compute two or more decimal fractions through thousandths?
5. Can students choose the correct answer from a list of five numbers?

Set for Teaching: State the Objective

Review meaning of decimal point and relate to previous learning.

Important skill in that money uses decimals.

Recall the process for adding numbers without decimals.

Teaching to the Objective:

Teacher - Model process of aligning decimal point

Give examples of problems properly aligned

Question student understanding

Respond to student behavior in terms of their understanding of the learning

Student - Activity practice proper alignment - problems chosen from text materials or developed by teachers

Teacher - Monitor progress of learners toward meeting objective

Teacher - Model computing sum

Model placing decimal in proper position in sum

Give examples of problems properly solved

Student Activity - Practice computing sum and placing decimal in proper position in sum

Teacher - Monitor efforts of learner toward meeting objectives

Student Activity - Independent practice on exercises directly related to the stated objective. These exercises should reflect student choosing proper solution.

Closure:

Teacher questions students relative to their understanding of objective and processes necessary to successfully execute exercises.

Based on level of understanding teacher relates learning to future needs of students.

RESOURCES

6th and 7th Grade Mathematics

Basic Educational Skill
Reference 3.10
(add decimal fractions
through thousandths)

SRA Test Measurement:
Computation 18-20

Objective: Given two or more decimal fractions through thousandths; students will be able to compute the sum and choose the correct answer from a list of five numbers.

Silver Burdette - Mathematics for Mastery

1. Add with decimals - page (s) 58-60
2. Page 139
3. Exercise 1-8

Arkansas Department of Education - Drop-In Mathematics - page 102

Houghton - Mifflin - Mathematics

Addition of decimals page 82-83

Holt, Rinehart, Winston - Holt School Mathematics

Adding decimals - pages 224-227

4th Grade Reading — Objective 2.4

Objective: Given a paragraph, the student will be able to identify and select appropriate order of events.

SRA Measurement Format:

Student is given a question and must choose from four selections the appropriate answer.

Task Analysis: (essential enroute learnings)

1. Student should be able to demonstrate a knowledge of the terms; first, second, third, etc., last, before, after.
2. Student should be able to depict sequence of events from a passage read orally.
3. Student should be able to place pictures in sequential order.
4. Student should be able to identify words on appropriate reading level.
5. Student should be able to identify and select the appropriate order of events.

Teacher Activity	Student Activity
Teacher:	Student:
- reads aloud short passage	- must be able to depict order of events
- arranges pictures of events to a story	- must number on paper the correct order of events
- arranges sentences that combine to make a story	- must arrange sentences in proper order
- distributes written passages with question pertaining to order of events	- must read and select from four selections the appropriate answer

Example Activity:

The robber looked inside a gas station in Long Beach, California. He thought that it would be an easy place to rob because there were no men inside. Three women were taking care of the station. The robber soon found out how wrong he was!

As Lorraine, Rita and Renee were sitting inside the station, the robber came in with a gun. He directed the women to give him the money. Lorraine gave him something else. She picked up a can of oil and threw it at him. It hit the robber on the head and he fell to the floor. Quickly the other women sat on him. The robber was happy when the police came. He knew that he would be safer in jail than with three angry women.

1. What happened next when Lorraine threw the oil can at the robber?

   (A) The three angry women ran out.

   (B) The robber ran away.

   (C) The robber fell to the floor.

   (D) The police came.

Grade 4

Objective 2.4 Given a paragraph, the student will be able to identify and select the appropriate order of events.

Harper and Row, Publisher

Dreams and Dragons

pp. 25 - Example: Which animal came to the party first?

pp. 81 - numbering sentences

pp. 88 - numbering sentences

pp. 91 - numbering sentences

pp. 107 - numbering sentences

Holt, Rinehart and Winston

4 - Time to Wonder, Level 13

pp. 36 - numbering sentences

pp. 105 - numbering sentences

Houghton and Mifflin

pp. 40 - number the sentences to show the correct order in which the events happen.

Rand-McNally and Company

Twirling Parallels - Level 11

pp. 7 - number sentences

Scott, Foresman

4 - Flying Hoofs

pp. 25-26 numbering sentences

5th Grade Reading Objective 2.2

Objective: Given a passage, student will be able to read and recall specific information.

SRA Measurement Format:

Student is given a question and must choose from four selections the correct answer.

Task Analysis: (Essential enroute learnings)

1 - Student should be able to identify words at the appropriate level of difficulty.

2 - Student should be able to recall specific information from a sentence.

3 - Student should be able to recall specific information after reading a passage.

Teacher Activity	Student Activity
Teacher:	Student:
- reads aloud	- must be able to recall specific information
- allows for students to create short paragraphs	- writes short paragraph
- reads paragraphs	- must be able to recall certain information
- distributes written passages with question to depict information	- must read and select from four selections the appropriate answer

EXAMPLE ACTIVITY:

"I'll get along, with a little help from my friends." That saying came true for John Crawford, when he found, at the age of eighty-one, that he had friends he didn't even know about.

White-haired and bearded, Mr. Crawford chose to live as the pioneers did - in a tiny, isolated log cabin in North Dakota. He had no electricty or running

water. However, a time came when he lost his job, his money ran out, and his letters to the government failed to bring him his social security payments.

Fortunately, John Maynard, editor of the Bottineau, North Dakota, newspaper, discovered Crawford's plight and wrote about it. Soon donations of clothes, money, and food poured in from around the state. A social worker saw to it that his government payments arrived again. Local families improved his cabin. The utility company installed electricity at no cost, and a barber donated a haircut. Thanks to a newspaper article, John Crawford can live comfortably during his remaining years.

3. Mr. Crawford's cabin was improved by:

(a) the government

(b) his relatives

(c) a construction company

(d) local families

Grade 5

Objective: Given a passage, student will be able to read and recall specific information.

Rand McNally Reading Program -

5 - Soaring Plateaus - Level 12

pp. 93 - answers question by writing the correct response.

pp. 63 - answers question by writing the correct response.

pp. 23 - answers question by writing the correct response.

Scott, Foresman

5 - Fins and Tales

pp. 55 - answer specific questions

Houghton - Mifflin

Keystone

pp. 12 - answer specific questions

pp. 42 - being able to outline a selection

LESSON PLAN

6th and 7th Grade Reading

Basic Educational Skill
Reference 2.1
(State the main idea of a selection)

SRA Test Measurement:
Comprehension: 4,12,16
22,34, 42

Objective: Given a selected reading passage, the student will be able to read and select the correct main idea statement from four alternatives.

Task Analysis:

1. Can the student read, with understanding, all words in a given selection?
2. Can students recognize changes in meaning by use of punctuation marks?
3. Can the student identify the figurative language used in a given selection?
4. Can the student select the words that indicate answers to what, where, when, why and how?
5. Can the student paraphrase the idea expressed in a sentence?
6. Can the student select the topic sentence of paragraphs in a given selection?
7. Can the student distinquish difference in styles of fiction and non-fiction, as expressed in direct and indirect discourse, scientific and biographical writing.

Teaching to the Objective:

Teacher	Student
Sets the lesson with presentation of objective. Defines main idea, and relates main idea to previous learning (Based on task analysis). Teacher questions student understanding of definition of main idea.	Attends to definition of main idea. Responds to teacher questions by paraphrasing definition of main idea.
Teacher models definition of main idea by selecting main idea from a given paragraph. Teacher questions student understanding by questioning.	Students respond to teacher questions by stating why the particular main idea was selected.

Teacher	Student
Teacher hands out a series of paragraphs. Teacher indicates importance of clue words, details and topic sentences. Teacher asks students to identify clue words, details and topic sentences in paragraphs.	Students underline or list clue words, details and topic sentences in given paragraphs.
Teacher monitors student understanding by questioning.	Students respond to questions by citing their answers.
Teacher hands out attached selection. Requests students to indicate main idea.	Students read selection and indicate answer.
Closure Teacher questions student understanding of main idea in a given selection. Teacher re-states concept of main ideas and topics addressing this skill.	Students respond to questioning by re-stating concept and skills presented.

"I'll get along, with a little help from my friends." That saying came true for John Crawford, when he found, at the age of eighty-one, that he had friends he didn't even know about.

White-haired and bearded, Mr. Crawford chose to live as the pioneers did - in a tiny, isolated log cabin in North Dakota. He had no electricity or running water. However, a time came when he lost his job, his money ran out, and his letters to the government failed to bring his social security payments.

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The main idea of this story is:

A. Pioneer life is hard.

B. A newspaper article helped a man.

C. North Dakota is a good place to live.

D. Government help is necessary.

6th and 7th Grade Reading

RESOURCES

Basic Educational Skill

*2.1 State in sentence form the main idea of a selection in which the main idea is directly stated or implied.

ALLYN & BACON INC. — The Widening Path Workbook

Activities:	Page	34	Select the main idea for a paragraph.
	Page	44	Select the best main idea for a paragraph.
	Pages	48-49	Use key words and details to select main idea.
	Page	85	Select the main idea for a given selection.
	Page	109	Identify the main idea in a poem.
	Page	129	Identify the main idea in a paragraph.

GINN AND COMPANY — Mountains Are For Climbing

Activities:	Pages	135-153	Name the theme for this radio play.

HARPER AND ROW — Time and Tiger's Workbook

Activities:	Page	17	Select the main idea in a paragraph.
	Pages	22-23	Read paragraph and study illustration for main idea.
	Page	31	Select the main idea of a paragraph.
	Page	74	Select the best summary for a selection.
	Page	81	Select the main idea expressed in a poem.
	Page	117	Underline the sentence that is the main idea of a paragraph.

HOLT, RINEHART, WINSTON — Riders on the Earth

Activities:	Page	84	News Story - From the first paragraph of a news story find the main idea. Find added details in the following paragraphs.
	Page	25	Titles as a clue for main ideas.
	Page	59	List main ideas from a selection.

HOUGHTON MIFFIN — Impressions Workbook

Activities:	Pages	19-20	Select the main idea in a paragraph.
	Pages	79-81	Getting the main idea in a paragraph.

MACMILLAN — Awakening

Activities:	Pages	19&92	Words have multiple meanings. The context determines main idea. Expressions

RAND MC NALLY — Shifting Anchors Workbook

Activities:		
	Page 7	Select the correct main idea of a selection.
	Page 19	Practice reading paragraphs and recalling main ideas.
	Page 33	Select the correct main idea of a paragraph.

SCOTT, FORESMAN — Racing Stripes

Activities:		
	Pages 67-76	Finding the Most Important Idea - Find the topic sentence, state the main idea, and list the supporting details.
	Pages 104-113	Birds of a Feather and Dreamers in a Carat Patch - Find the main idea, supporting details, and summarize the selection.
	Page 14	Select the main idea from three choices.
	Page 15	Select the main idea from three choices.
	Page 16	Select the main idea from three choices.

SRA

Activities: Use "How Well Did You Read" from Reading Lab IIa, IIb, IIc, and IIIa. Use Schoolhouse Comprehension Kit. Use Newslab and Newslab II Activity Cards. Use Researchlab skill cards. Use Super A, Super B, Super AA, and Super BB Kits.

IX. Achievement of Quality Control

When school districts can determine the extent to which the stated objectives of their program, the actual teaching to those objectives in the classroom, and the assessment procedures utilized are congruent, then they have achieved quality contro over their school's curriculum.

Test data then becomes meaningful in determining the extent to which students are able to achieve the objectives of the school and the state.

The stated curriculum of the school then becomes meaningful in determining the extent to which teaching relates to what students are expected to learn.

If school districts wish to improve the performance of students as measured by norm and criterion-referenced standardized tests, then they must directly address the content and format contained in those tests.

If test data is significant, then its significance must lie in its feedback to schools on the quality of their instructional program. Without a knowledge of precisely what the test measures, the feedback will have little, if any, significance.

Quality control enables a school to determine the focus and direction of their curriculum. This becomes significant when stated objectives, the actual teaching to those objectives, and the assessment of student attainment of those objectives directly match.